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PLANTS OF THE LITTLE BEAN MARSH WILDLIFE AREA, PLATTE COUNTY, MISSOURI

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INTRODUCTION

This report lists the species found throughout the Little Bean Marsh wildlife area. It is hoped this list will provide a basis for future work in the vegetation and ecology of the marsh and the surrounding community.

A brief history of the wildlife area and an analysis of the Little Bean Marsh natural area was given by Castaner and LaPlante (1992a). Little Bean Marsh Wildlife Area contains a vestige of the Missouri River's natural marsh system. The 248 acre remnant oxbow is located at the northeast end of Little Bean Lake in northwest Platte county and lies in the upper Missouri River Section of the Big Rivers Natural Division (Thom and Wilson 1980). Purchased in 1981 by the Missouri Conservation Department, a 151 acre sub-tract containing the marsh was set-aside and designated a natural area within the wildlife area. During the summer of 1986, under a grant from the Missouri Department of conservation, a study of the marsh community of the Little Bean Marsh Wildlife area was undertaken. Using line-intercept transects, the marsh was found to be dominated respectively by *Scirpus fluviatilis*, *Polygonum coccineum*, *Sagittaria brevirostra*, *Leersia oryzoides*, *Scirpus acutus*, and *Typha latifolia*. When no clearly discernible vegetation series could be determined, they suggested that because of periodic flooding the marsh community consisted of a mosaic of catastrophically induced and maintained patches of microcommunities in various stages of successional development.

In an unreported preliminary study, a woody bottomland community within the area was examined along line transects. Using an importance value (IV) based on equal weighing of relative density (number of individuals), relative frequency (distribution among plots), and relative dominance (as a function of diameter at breast height), the community was dominated by understory species such as Rough-leaved Dogwood (*Cornus drummondi*), Redbud (*Cercis canadensis*), and

Paw-paw (*Asimina triloba*) with IV's of 47.9, 40.6, & 29.4 respectively (compared to a theoretical maximum of 300) (Table 1). Ground cover vegetation along the transect was extremely sparse. Only eleven plant species (principally three species of *Galium*) were found. It is suggested that periodic flooding in the wildlife area is responsible for this atypical woody community.

Table 1. Relative frequency, relative density, relative dominance and importance values for woody vegetation greater than 1 cm in diameter found in a bottomland forest of Little Bean Marsh Wildlife Area, Platte county, Missouri, during the summer of 1986.

Species	Freq.	Den.	Dom.	IV.
Cornus drummondi (Roughleaved Dogwood)	8.0	18.3	21.6	47.9
Cercis canadensis (Redbud)	8.0	11.3	21.3	40.6
Asimina triloba (Pawpaw)	4.0	21.4	04.0	29.4
Fraxinus americana (White Ash)	8.0	05.3	13.0	26.3
Morus alba (White Mulberry)	4.0	10.1	06.6	20.7
Fraxinus pennsylvanica (Green Ash)	8.0	04.1	07.8	19.9
Vitis sp. (grape sp.)	8.0	07.7	03.1	18.8
Acer negundo (Box Elder)	8.0	04.1	05.9	18.0
Quercus prinoides (Chestnut Oak)	4.0	07.1	04.3	15.4
Ulmus rubra (Slippery Elm)	8.0	04.7	02.2	14.9
Populus deltoides (Cottonwood)	4.0	00.5	06.0	10.5
Gymnocladus dioica (Kentucky Coffeetree)	4.0	01.1	01.5	06.6
Prunus sp. (wild plums)	4.0	00.5	00.5	05.0
Celtis occidentalis (Hackberry)	4.0	00.5	00.4	04.9
Platanus occidentalis (Sycamore)	4.0	00.5	00.4	04.9
Crataegus sp. (hawthorn)	4.0	00.5	00.2	04.7
Juglans nigra (Black Walnut)	4.0	00.5	00.1	04.6
Carya illinoensis (Bitternut)	4.0	00.5	00.1	04.6
	100.	100.	100.	300.

METHODS

Extensive collections of plants from the Little Bean Marsh Wildlife Area began in 1981. Further collecting was intensified during 1986 and 1987, under a grant from the Missouri Department of Conservation, and continued into 1991.

Plants were collected, dried, identified, and mounted; and deposited in herbarium of Central Missouri State University (WARM). All specimens have been identified by the senior author.

RESULTS

A total of 337 taxa, including 320 species, 15 varieties, and 2 putative hybrids, within 77 families and 199 genera, was found in the Little Bean Marsh Wildlife Area. Over half of the taxa were members of the eight most common families: Asteraceae (42 taxa), Poaceae (39), Cyperaceae (25), Fabaceae, s.s., (16), Polygonaceae (16), Rosaceae (11), Euphorbiaceae (11), and Lamiaceae (10).

NOTES

Eleocharis atropurpurea (Cyperaceae) a species previously unreported in Missouri was found growing close to *Scirpus saximontanus*, another rare Missouri species, at the edge of one of the open field depressions near the entrance to the refuge (Castaner 1984). He suggested that since the marsh is very close to the Missouri River these species may occur in similar habitats throughout the region. After floods, newly created depressed mud flats become available for plant establishment. These exposed areas of new fluvial deposits permit rare or uncommon species to prosper until larger herbaceous plants dominate the area. Thus these depressions may behave as refugia for some rare or uncommon species.

Carex sychnocephala (Cyperaceae) another new species to Missouri was found growing along the south shore of Little Bean Lake within the wildlife area south of the marsh (Castaner 1988).

Bergia texana (Elatinaceae), a small and relatively elusive plant, was also reported along the south shore area growing near the *Carex synchnocephala* site.

Chenopodium pratericola Rydb. (Chenopodiaceae) a goosefoot, previously only reported from waste ground and railroads in Jackson and St. Louis counties was found growing along a path near a parking lot. On the basis of its strong erect growth and narrow upper branching the specimen appears to be this species; however, sepals were somewhat keeled as in C. *desiccatum* A. Nelson. The three-veined leaves and narrow branching separates it from a closely related species, *C. pallescens* Standley.

Other interesting species found in the Wildlife area were *Typha* x *glauca* Godr., a possible hybrid species of *T. latifolia* and *T. angustifolia*; *Iris pseudacorus* L., a rather uncommon iris; and *Quercus X Bushii* Sarg., a putative hybrid between Black Oak and Blackjack Oak.

In attempting to identify a species of nettle, *Urtica*, (*LaPlante 905*), the varied

nature of keys and summaries became all too evident. The identity of the specimen was more a function of each summary and its key rather than any set of characteristics. We think it may be *U. urens* L, Dwarf Nettle.

Finally, a variation of subjective importance is noted. Two color flowering forms of *Heteranthera limosa*, blue and white, were found.

SPECIES LIST

All voucher specimens are deposited in the Herbarium at Central Missouri State University, Warrensburg, Missouri [WARM].

The species list is arranged according to the page in which the species is found in Flora of Missouri (Steyermark 1963); voucher specimens are listed for each taxon. The number of taxa for each family follows the family name. For the purpose of uniformity and timeliness, scientific and common names are those used by Yatskievych and Turner (1990). When different from Steyermark, referral pages to Yatskeivych and Turner are given in brackets [YT1], followed by the name by which the specimen would be called using Steyermark (**S**:). New county records (based on Steyermark) are noted with an asterisk (*). If the species is new to the county an asterisk precedes the species name; if an intraspecific taxon is new to the county an asterisk precedes its name; thus, one specimen may be tallied as a new species and a new variety or form for the county. New state records are noted with a double asterisk (**). Introduced non-native taxa are designated by an exclamation mark (!).

LIST OF VOUCHER SPECIMENS OF TAXA COLLECTED FROM THE LITTLE BEAN MARSH WILDLIFE AREA FROM 1981 TO 1988

FERN ALLIES, FERN, AND CONIFER FAMILIES

EQUISETACEAE (2)

11 *E. arvense* L., Field Horsetail
var. *arvense* f. *arvense* - *Castaner 8561*

12 **Equisetum hyemale* L., Winter Scouring Rush
*var. *affine* (Engelm.) A. A. Eaton, [YT8],: **S**: var. *pseudohyemale* (Farw.) Morton - *Castaner 10125*

SALVINIACEAE (1)

17 **Azolla mexicana* Presl., Mosquito Fern - *Castaner 7252*

CUPRESSACEAE (1)

45 *Juniperus virginiana* L., Red Cedar
var. *virginiana* - *LaPlante 842*

MONOCOT FAMILIES

TYPHACEAE (3)

46 *Typha latifolia* L., Common Cattail
f. *latifolia* - *Castaner 9267, 9266*
48 **T. angustifolia* L., Narrow-leaved Cattail - *LaPlante 490*
48 *T.* x *glauca* Godr., Hybrid Cattail, [YT286], **S**: *T. glauca* Godr. - *Castaner 9267*

SPARGANIACEAE (1)

49 **Sparganium eurycarpum* Engelm., Bur-Reed - *LaPlante 511*

POTAMOGETONACEAE (2)

52 *Potamogeton pectinatus* L., Fennel-leaved Pondweed - *LaPlante 496*
55 *P. nodosus* Poir., Longleaf Pondweed - *Castaner 9274*

NAJADACEAE (1)

57 *Najas guadalupensis* (Spreng.) Mangus, Naiad - *Castaner 8942*

ALISMACEAE (4)

60 *Echinodorus berteroi* (Spreng.) Fassett, Burhead
var. *berteroi*, [YT221], **S**: var. *lanceolatus* (Engelm.) Fassett - *Castaner 8611*
62 *Sagittaria calycina* Engelm., Arrowhead, [YT221], **S**: *S. montevidensis* Cham. & Schl. - *Castaner 10127, LaPlante 347*
64 **S. brevirostra* Mack. & Bush, Arrowhead, [YT221], **S**: *S. engelmanniana* subsp. *brevirostra* (Mack. & Bush) Bogin - *LaPlante 644*
66 *S. latifolia* Willd., Duck Potato
var. *latifolia*, [YT221], **S**: var. *obtusa* (Muhl.) Wieg. - *LaPlante 803*

POACEAE (39)

86 !*Bromus japonicus* Thumb. ex Murray, Japanese Brome - *Castaner 8548*
88 *B. tectorum* L., Downy Cress

!var. *tectorum* - *LaPlante 420*

106 **Eragrostis capillaris* (L.) Nees, Lace Grass - *LaPlante 713*

107 **E. frankii* C. A. Meyer, Sandbar Love Grass
*var. *frankii* - *LaPlante 859*

108 !*E. cilianensis* (All.) Vign. ex Janchen, Stink Grass - *LaPlante 939*

110 **E. spectabilis* (Pursh) Steud., Purple Love Grass, [YT262],) **S**: *E. spectabilis*
var. *sparsihirsuta* Farw. - *LaPlante 940*

113 **Leptochloa fascicularis* (Lam.) A. Gray, Bearded Spangletop, [YT265], **S**:*Diplachne fascicularis* (Lam.) Beauv. - *LaPlante 580*

116 *Phragmites australis* (Cav.) Trin. ex Steudel, Reed, [YT269], **S**: *P. communis* Trin. var. *berlandieri* (Fourn.) Fern. - *Castaner 8540, LaPlante 646*

120 *Tridens flavus* (L.) Hitchc., Purple Top
var. *flavus*, [YT273], **S**: f. *cupreus* (Jacq.) Fosb. - *Castaner 8948*

124 !**Triticum aestivum* L., Wheat - *LaPlante 267*

131 *Elymus virginicus* L., Virginia Wild Rye
var. *virginicus* f. *virginicus* - *Castaner 8603*
*var. *submuticus* Hook. - *Castaner 8564*

133 !*Hordeum pusillum* Nutt., Little Barley - *LaPlante 483*

138 **Sphenopholis obtusata* (Michx.) Scribn., Wedge Grass
var. *obtusata*, [YT272], **S**: var. *lobata* (Trin.) Scribn. - *LaPlante 518, Castaner 8566*

152 *Alopecurus carolinianus* Walt., Carolina Foxtail - *LaPlante 517*

156 **Muhlenbergia frondosa* (Poir.) Fern., Nimble Will
*f. *frondosa* - *LaPlante 853*

177 !*Eleusine indica* (L.) Gaertn., Goose Grass - *Castaner 10075*

188 *Phalaris arundinacea* L., Reed Canary Grass - *Castaner 9275*

192 **L. oryzoides* (L.) Sw., Rice Cut Grass, [YT264], **S**: f. *oryzoides* - *LaPlante 602*

192 **Leersia virginica* Willd., White Grass - *LaPlante 768*

194 !**Digitaria ciliaris* (Retz) Koeler, Southern Crab Grass, [YT258], **S**: *D. sanguinalis* (L.) Scop. var. *cilaris* (Retz.) Parl. - *Castaner 8604*

196 !**D. ischaemum* (Schreb.) Schreb. ex Muhl., Smooth Crab Grass
*var. *ischaemum* - *LaPlante 881*

201 **Paspalum setaceum* Michx., Paspalum
*var. *muhlenbergii* (Nash) D. Banks, Paspalum, [YT268], **S**: P. *ciliatifolium* var. *muhlenbergii* (Nash) Fern. - *LaPlante 945*

202 **P. laeve* Michx., Field Paspalum
*var. *laeve* - *LaPlante 232*

220 **Dicanthelium oligosanthes* Schultes, Panicum,
*var. *oligosanthes*, [YT258], **S**: *Panicum oligosanthes* Schultes var. *oligosanthes* - *LaPlante 937*
*var. *scribenianum* (Nash) Gould, [YT258], **S**: var. *helleri* (Nash) Mohl. - *Castaner 8950*

225 *Panicum dichotomiflorum* Michx., Fall Panic Grass
*var. *dichotomiflorum* - *LaPlante 913*
226 *P. capillare* L., Common Witch Grass
var. *capillare* - *LaPlante 279*
228 **P. virgatum* L., Switch Grass - *Castaner 8598*
233 *E. crusgalli* (L.) Beauv., Barnyard Grass,
!*var. *crusgalli* f. *crusgalli* - *LaPlante 952*
!var. *crusgalli* f. *longiseta* (Trin.) Farw. - *Castaner 10072*
234 *Echinochloa muricata* (Beauv.) Fern., Barnyard Grass
var. *muricata* - *LaPlante 888*
237 !**Setaria pumila* (Poiret) Roemer & Schultes, Yellow Foxtail, [YT270], **S**: *S. glauca* (L.) Beauv. - *Castaner 8585, 10113*
237 **S. parviflora* (Poiret) Kerguelen, Prairie Foxtail, [YT270], **S**: *S. geniculata* (Lam.) Beauv. - *LaPlante 656*
238 !*S. viridis* (L.) Beauv., Green Foxtail
var. *viridis* - *Castaner 8547, LaPlante 851*
238 !*S. faberi* F. Herm., Nodding Foxtail - *Castaner 10119*
240 *Cenchrus longispinus* (Hack.) Fern., Sandbur - *Castaner 8555*
248 !*Sorghum halepense* (L.) Pers., Johnson Grass - *LaPlante 856*

CYPERACEAE (25)

260 **Cyperus aristatus* Rottb. - *Castaner 10066, 10128*
262 **C. erythrorhizos* Muhl. - *Castaner 10063*
264 **C. esculentus* L., Yellow Nut Grass
var. *esculentus* f. *esculentus* - *Castaner 7247*
266 *C. strigosus* L. var. *strigosus* - *LaPlante 825*
274 ***Eleocharis atropurpurea* (Retz) Kunth, Spike Rush - *Castaner 7260*
280 **E. erythropoda* Steud., Spike Rush, [YT231], **S**: *E. calva* Torr. - Spike Rush - *Castaner 10048*
284 **Fimbristylis autumnalis* (L.) R. & S. - *Castaner 10130*
286 ***Scirpus saximontanus* Fern. - *Castaner 7259*
292 *S. validus* Vahl, Great Bulrush, [YT234], **S**: var. *creber* Fern. - *Castaner 9272*
292 *S. acutus* Muhl. ex Bigelow, Great Bulrush - *Castaner 7249*
294 *S. fluviatilis* (Torr.) Gray, River Bulrush - *Castaner 9265*
300 **Fuirena simplex* Vahl., Umbrella Grass - *Castaner 7246, 10083*
302 **Lipocarpha micrantha* (Vahl) Tucker, [YT232], **S**: *Hemicarpha micrantha* (Vahl) Britt. - *Castaner 10082*
311 ***Carex sychnocephala* Carey - *Castaner 10089*
331 *C. leavenworthii* Dewey - *Castaner 6947*
334 **C. gravida* Bailey - *Castaner 6945*
335 **C. vulpinoidea* Michx. - *Castaner 7244*
340 **C. conjuncta* Boott - *LaPlante 486*
341 **C. cristatella* Britt. - *LaPlante s. n.*

343 **C. brevior* (Dew.) Mackenz. - *LaPlante 102*
343 *C. molesta* Mackenz. - *Castaner 6948, 6938*
354 *C. blanda* Dew. - *Castaner 6936*
355 **C. granularis* Muhl. var. *granularis* - *Castaner 6935*
358 *C. amphibola* Steud. var. *turgida* Fern. - *LaPlante 433*
374 **C. hyalinolepis* Steudel - *Castaner 6946, 6937*

LEMNACEAE (4)

388 *Spirodela polyrhiza* (L.) Schleid, Big Duckweed - *Castaner 7253, 8934, 8929*
389 **Lemna minor* Philippi, Lesser Duckweed - *Castaner 8932*
389 **L. perpusilla* (L.) Torr. - *Castaner 7263*
390 **Wolffia columbiana* Philippi, Water Meal - *Castaner 7262*

PONTEDERIACEAE (2)

404 *Heteranthera limosa* (Sw.) Willd., Mud Plantain, incl. a blue-flowered form - *Castaner 7256* and a white-flowered form - *Castaner 7257*

JUNCACEAE (3)

410 *Juncus interior* Wieg., Inland Rush - *Castaner 6940*
410 **J. dudleyi* Wieg. - *Castaner 8583*
413 **J. torreyi* Coville - *Castaner 7245, 8612, 10076*

SMILACACEAE (2)

451 **Smilax lasioneuron* Hook., Carrion Flower, [YT277], **S**: *S. herbacea* L. var. *herbacea* - *LaPlante 505*
452 **S. hispida* Muhl., Bristly Greenbrier, [YT277], **S**: *S. tamnoides* var. *hispida* (Muhl.) Fern. - *LaPlante 624*

IRIDACEAE (2)

462 **Iris virginica* L., Southern Blue Flag
*var. *shrevei* (Small) E. Anders. - *LaPlante 461*
463 !**I. pseudacorus* L., Yellow Iris, Yellow Flag - *Castaner 6941*

DICOT FAMILIES

SALICACEAE (8)

494 *S. nigra* Marsh., Black Willow - *LaPlante 475*
494 *Salix amygadaloides* Anders., Peach-leaved Willow - *LaPlante 121*

496 !**S. fragilis* L., Crack Willow - *LaPlante 335*
496 **S. alba* L., White Willow
*var. *caerulea* (Smith) Smith, [YT194], **S**: *S. calva* G. Mey. - *LaPlante 639*
497 *S. exigua* Nutt., Sandbar Willow, [YT194], **S**: *S. interior* Rowlee, incl. f. *interior* - *Castaner 9270*, *LaPlante 117*, *603*, and *f. *wheeleri* (Rowlee) Rouleau - *LaPlante 684*
498 **S. eriocephala* Michx., Diamond Willow, [YT194], **S**: *S. rigida* Muhl. var. *rigida* f. *rigida* - *Castaner 8597*, *9269*
508 *Populus deltoides* Marsh. ssp. *deltodies*, Cottonwood, [YT193], **S**: *P. deltoides* Marsh var. *deltoides* f. *deltoides* - *LaPlante 226*

JUGLANDACEAE (2)

510 *Juglans nigra* L., Black Walnut
f. *nigra* - *LaPlante 936*
514 *Carya illinoensis* (Wang.) K. Koch, Pecan - *LaPlante 837*

FAGACEAE (4)

539 *Quercus prinoides* Willd., Dwarf Chestnut Oak, [YT121], **S**: var. *prinoides* - *LaPlante 309*
539 *Q. muehlenbergii* Engelm., Chestnut Oak, [YT121], **S**: incl. *Q. prinoides* var. *acuminata* (Michx.) Gl. f. *acuminata* - *LaPlante 124*, and *var. *acuminata*
f. *alexanderi* (Britt.) Steyerm. - *LaPlante 257*
543 **Quercus x Bushii* Sarg., Black Oak x Blackjack Oak Putative Hybrid - *LaPlante 809*

ULMACEAE (5)

554 *Ulmus americana* L., American Elm - *LaPlante 337*
555 *U. rubra* Muhl., Slippery Elm - *LaPlante 144*
555 !**U. pumila* L., Siberian Elm - *LaPlante 575*
558 *Celtis occidentalis* L., Hackberry
*var. *occidentalis* - *LaPlante 297*
560 **C. laevigata* Willd., Sugarberry
*var. *texana* Sarg. - *LaPlante 623*

MORACEAE (2)

562 *M. rubra* L., Red Mulberry - *LaPlante 258*
562 !*Morus alba* L., White Mulberry
var. *alba* f. *alba* - *LaPlante 131*

CANNABACEAE (1)

566 **Humulus japonicus* Sieb. & Zucc., Japanese Hops - *LaPlante 802*

URTICACEAE (5)

567 *Urtica* sp., Nettle - *LaPlante 905*
568 *Laportea canadensis* (L.) Wedd., Wood Nettle - *LaPlante 633*
568 *Boehmeria cylindrica* (L.) Sw., False Nettle
var. *cylindrica* - *Castaner 10057*
570 *Pilea pumila* (L.) Gray, Clearweed - *Castaner 10056*
571 *Parietaria pensylvanica* L., Pennsylvania Pellitory
var. *pensylvanica* - *Castaner 10051*

POLYGONACEAE (16)

578 *Rumex altissimus* A. Wood, Pale Dock - *LaPlante 482*
578 !**R. patientia* L., Patience Dock - *LaPlante 933*
580 !*R. crispus* L., Sour Dock - *Castaner 8565*
580 !**R. stenophyllus* Ledeb. - *Castaner 10079*
581 *R. maritimus* L., Glden Dock
var. *feuginus* (Phil.) Dusen - *Castaner 8570, 10053*
586 **Polygonum erectum* L., Erect Knotweed - *Castaner 10132*
586 !**P. achoreum* Blake, Polygonum - *LaPlante 925*
587 !**P. aviculare* L., Knotweed
*var. *aviculare* - *LaPlante 621*
588 *P.* amphibium L., Water Smartweed
var. emersum Michx, [YT164], **S**: incl. P. *coccineum* Muhl. var. *coccineum* f. *coccineum* - *Castaner 8939* and *var. *coccineum* f. *natans* (Wieg.) Stanf. - *LaPlante 743*, and var. *pratincola* (Greene) Stanford - *LaPlante 697*
590 *P. pensylvanicum* L., Pinkweed
var. *laevigatum* Fern. f. *laevigatum* - *LaPlante 899*
591 *P. lapathifolium* L., Pale Smartweed
var. *lapathifolium* - *Castaner 10118*
592 !*P. persicaria* L., Lady's Thumb
var. *persicaria* - *Castaner 10121*
592 **P. punctatum* Ell., Water Smartweed
*var. *punctatum* - *Castaner 8938*
*var. *confertiflorum* (Meissn.) Fassett - *LaPlante 669*
597 **P. scandens* L., False Buckwheat
*var. *scandens* - *LaPlante 934*
*var. *cristatum* (Engelm. & Gray) Gl. - *LaPlante 782*

CHENOPODIACEAE (4)

608 !**Chenopodium* cf. *pratericola* Rydb., Goosefoot, [YT91], **S**: *C. desiccatum* var. *leptophylloides* (Murr.) Wahl - *Castaner 8582*

610 *C. simplex* (Torrey) Raf., Maple-leaved Goosefoot, [YT91], **S**: *C. gigantospermum* Aellen - *LaPlante 283*

611 **C. album* L., Lamb's Quarters, Pigweed
*var. *album* - *LaPlante 928*
*var. *lanceolatum* (Muhl. ex Willd.) Coss & Germ. - *Castaner 8947*

AMARANTHACEAE (2)

621 *Amaranthus rudis* Sauer, Water Hemp, [YT14], **S**: *A. tamariscinus* Nutt. - *Castaner 10126*

624 **A. blitoides* S. Wats., Tumbleweed, [YT14], **S**: *A. graecizans* L. - *LaPlante 728*

PHYTOLACCACEAE (1)

630 *Phytolacca americana* L., Pokeweed - *LaPlante 287*

CARYOPHYLLACEAE (3)

643 !**Arenaria serpyllifolia* L., Thyme-leaved Sandwort
*var. *serpyllifolia* - *LaPlante 110*

648 *Cerastium nutans* Raf., Nodding Chickweed - *LaPlante 411*

654 **Silene antirrhina* L., Sleepy Catchfly
*f. *antirrhina* - *LaPlante 106*

CERATOPHYLLACEAE (1)

662 *Ceratophyllum demersum* L., Hornwort, Coontail - *Castaner 8943*

NELUMBONACEAE (1)

668 *Nelumbo lutea* (Willd.) Pers., American Lotus - *LaPlante 640*

ANNONACEAE (1)

671 *Asimina triloba* (L.) Dunal, Paw-paw - *LaPlante 256*

RANUNCULACEAE (2)

692 *Ranunculus sceleratus* L., Cursed Crowfoot
var. *sceleratus* f. *sceleratus* - *LaPlante 66*

702 *Anemone canadensis* L., White Anemone - *LaPlante 67*

BERBERIDACEAE (1)

710 *Podophyllum peltatum* L., May Apple
f. *peltatum* - *LaPlante 401*

MENISPERMACEAE (1)

714 *Menispermum canadense* L., Moonseed - *Castaner 8562*

FUMARIACEAE (1)

725 *Corydalis micrantha* (Engelm.) Gray ssp. *micrantha*, Small Flowered Corydalis, [YT122], **S**: *C. micrantha* - *Castaner 8537*

BRASSICACEAE (8)

742 !*Thlaspi arvense* L., Field Penny cress - *Castaner 8529*
742 *Capsella bursa-pastoris* (L.) Medikus, Shepherd's Purse
var. *bursa-pastoris* - *Castaner 8530*
746 *Draba reptans* (Lam.) Fern., Whitlow Grass, [YT70], **S**: *var. *micrantha* (Nutt.) Fern. - *Castaner 8531*
760 *Rorippa sessiliflora* (Nutt. ex T. & G.) Hitchcock, Sessile-flowered Cress - *LaPlante 508*
760 *R. palustris* (L.) Bess. ssp. *glabra* var. *fernaldiana* (Butt. & Abbe) Stuckey, Marsh Yellow Cress, [YT73], **S**: *R. islandica* var. *fernaldiana* Butt. & Abbe - *Castaner 8576, 9268, 10068*
764 **Erysimum repandum* L., Bushy Wallflower - *Castaner 8528*
766 *Camelina microcarpa* Andrz., Littlepod False Flax - *LaPlante 88*
766 *Descurainia pinnata* (Walt.) Britt., Tansy Mustard
ssp. *brachycarpa* (Richardson) Detl., [YT70], **S**: *D. pinnata* var. *brachycarpa* (Richards.) Fern. - *Castaner 8527*

SAXIFRAGACEAE (1)

774 *Penthorum sedoides* L., Ditch Stonecrop - *Castaner 8575*

PLATANACEAE (1)

789 *Platanus occidentalis* L., Sycamore. [YT160], **S**: var. *occidentalis* f. *occidentalis* - *LaPlante 122*

ROSACEAE (11)

823 *Fragaria virginiana* Duchesne, Wild Strawberry, [YT183], **S**: *var. *illinoensis* (Prince) Gray - *LaPlante 884*
827 *Potentilla simplex* Michx., Common Cinquefoil
var. *simplex* - *LaPlante 448*
828 *P. norvegica* L., Rough Cinquefoil, [YT185], **S**: var. *norvegica* - *Castaner 10122*
828 **P. rivalis* Nutt. ex T. & G., Brook Cinquefoil
*var. *millegrana* (Engelm.) Wats. - *Castaner 10073*
*var. *pentrandra* (Engelm.) Wats. - *Castaner 10115*
832 *Geum canadense* Jacq., White Avens, [YT183], **S**: var. *camporum* (Rydb.) Fern. & Weath. - *LaPlante 275*
846 *Agrimonia pubescens* Wallr., Downy Agrimony - *LaPlante 808*
849 !**Rosa multiflora* Thunb. ex Murray, Multiflora Rose - *LaPlante 313*
849 *R. setigera* Michx., Prairie Rose
var. *tomentosa* f. *tomentosa* - *LaPlante 111*
860 **Prunus hortulana* Bailey, Wild Goose Plum - *LaPlante 405*
860 *P. munsoniana* Wight & Hedrick, Wild Goose Plum - *Castaner 8931*

MIMOSACEAE (1)

870 *Desmanthus illinoensis* (Michx.) MacM. ex Robinson & Fern., Prairie Mimosa - *Castaner 8951*

CAESALPINIACEAE (4)

872 *Gymnocladus dioica* (L.) K. Koch, Kentucky Coffee Tree - *LaPlante 336*
873 *Gleditsia triacanthos* L., Honey Locust
f. *triacanthos* - *LaPlante 290*
875 *Chamaecrista fasciculata* (Michx.) E. Greene, Showy Partridge Pea, [YT76], **S**: *Cassia fasciculata* Michx. var. *fasciculata* f. *fasciculata* - *Castaner 8587*
876 *Cercis canadensis* L., Eastern Redbud
var. *canadensis* f. *canadensis* - *LaPlante 146*

FABACEAE (16)

882 *Crotalaria sagittalis* L., Rattlebox, [YT109], **S**: *var. *sagittalis* - *Castaner 8549*
886 *Trifolium repens* L.
!var. *repens*, White Clover, [YT118], **S**: f. *repens* - *Castaner 8596*
891 !*Medicago lupina* L., Black Medick, [YT113], **S**: var. *glandulosa* Neilr. - *Castaner 10049*
894 !*Melilotus officinalis* (L.) Pallas, Yellow Sweet Clover - *LaPlante 96*

894 !*M. albus* Medikus, White Sweet Clover - *LaPlante 114*
898 *Dalea leporina* (Ait.) Bullock, Foxtail Dalea, [YT110], **S**: *D. alopecuroides* Willd. - *LaPlante 345*
903 **Amorpha fruticosa* L., False Indigo, [YT107], **S**: var. *angustifolia* Pursh. - *LaPlante 615*
914 *Desmodium glutinosum* (Muhl. ex Willd) A. Wood., Large-flowered Tick Clover, [YT110], **S**: f. *glutinosum* - *LaPlante 832*
916 **D. canescens* (L.) DC., Hoary Tick Clover
*f. *canescens* - *LaPlante 699*
918 *D. obtusum* (Muhl. ex. Willd.) DC., Tick Trefoil, [YT111], **S**: *D. rigidum* (Elliott) DC.- *Castaner 10123*
922 **D. paniculatum* (L.) DC., Tick Trefoil, [YT111], **S**: var. *paniculatum* - *La Plante 320*
932 *Lespedeza capitata* Michx., Lespedeza, [YT113], **S**: var. *capitata* - *LaPlante 941*
947 **Apios americana* Medikus, Groundnut, [YT107], **S**: var. *americana* f. *pilosa* Steyermark - *LaPlante 871*
951 **Strophostyles helvula* (L.) Elliott, Wild Bean
*var. *helvula* - *Castaner 10109*
*var. *missouriensis* (S. Wats.) Britt - *Castaner 10110*
953 *Amphicarpaea bracteata* (L.) Fern., Hog Peanut, [YT107], **S**: var. *bracteata* - *Castaner 8573*

OXALIDACEAE (1)

960 *Oxalis stricta* L., Yellow Wood Sorrel - *Castaner 8550*

GERANIACEAE (1)

963 *Geranium carolinianum* L., Cranesbill, [YT125], **S**: *var. *confertiflorum* Fernald - *LaPlante 108*

RUTACEAE (1)

966 *Zanthoxylum americanum* Mill., Common Prickly Ash
f. *americanum* - *LaPlante 155*

EUPHORBIACEAE (11)

976 *Croton glandulosus* L., Sand Croton
var. *septentrionalis* Muell. Arg. - *LaPlante 592*
977 *C. capitatus* Michx., Woolly Croton, Hogwort
var. *capitatus* - *LaPlante 780*
977 *C. monanthogynus* Michx., One-seed Croton - *LaPlante 923*
979 **Acalypha ostryaefolia* Riddell, Three-seeded Mercury - *LaPlante 852*

979 **A. rhomboidea* Raf., Three-seeded Mercury, [YT103], **S**: var. *rhomboidea* - *Castaner 8574, 10065*
979 *A. virginica* L., Three-seeded Mercury - *LaPlante 924*
986 *Euphorbia dentata* Michx., Toothed Spurge, [YT106], **S**: f. *dentata* - *Castaner 8546, 10070*
992 *Chamaesyce. serpens* (HBK.) Small, Round-leaved Spurge, [YT104], **S**: *Euphorbia serpens* HBK. - *LaPlante 727*
992 *C. nutans* (Lag.) Small, Nodding Spurge, [YT104], **S**: *Euphorbia maculata* L. - *LaPlante 579*
994 **C. maculata* (L.) Small, Milk Purslane, [YT104], **S**: *Euphorbia supina* Raf. - *Castaner 8591, 10114*
996 *C. glyptosperma* (Engelm.) Small, Sand Mat, [YT104], **S**: *Euphorbia glyptosperma* Engelm.- *Castaner 8592*

ANACARDIACEAE (2)

1000 *Rhus glabra* L., Smooth Sumac, [YT15], **S**: var. *glabra* - *LaPlante 944*
1004 **Toxicodendron radicans* (L.) O. Ktze subsp. *pubens* (Engelm.) Gillis, Poison Ivy, [YT16], **S**: *Rhus radicans* var. radicans f. *hypomalaca* Fern. - *LaPlante 130*

CELASTRACEAE (2)

1008 *Euonymus atropurpureus* Jacq., Wahoo - *LaPlante 833*
1010 *Celastrus scandens* L., American Bittersweet - *LaPlante 811*

ACERACEAE (2)

1018 *A. saccharinum* L., Silver Maple - *LaPlante 229*
1018 *Acer negundo* L., Box Elder
var. *negundo* - *LaPlante 123*

BALSAMINACEAE (1)

1026 **Impatiens capensis* Meerb., Spotted Touch-me-not - *LaPlante 273*

VITACEAE (5)

1031 *Ampelopsis cordata* Michx., Raccoon Grape - *LaPlante 908*
1034 *Parthenocissus quinquefolia* (L.) Planch., Virginia Creeper
*f. *hirsuta* (Donn) Fern. - *Castaner 8580*
1036 *Vitis aestivalis* Michx., Summer Grape
*var. *aestivalis* - *Castaner 8578*
1038 *V. riparia* Michx., River Bank Grape - *LaPlante 846*
1040 **V. vulpina* L., Winter Grape - *LaPlante 312*

MALVACEAE (4)

1052 !*Sida spinosa* L., Prickly Sida - *LaPlante 726*
1052 !*Abutilon theophrasti* Medikus, Velvet Leaf - *Castaner 10111*
1054 **Hibiscus. laevis* All., Rose Mallow, [YT144], **S**: H. *militaris* Cav. - *Castaner 8589, 7250*
1054 !**H. trionum* L., Flower-of-an-hour - *LaPlante 729*

ELATINACAEAE (1)

1064 **Bergia texana* (Hook.) Seubert, Bergia - *Castaner 10077*

VIOLACEAE (3)

1072 *Viola* sororia Willd., Common Violet
f. *sororia*, [YT217], **S**: incl. V. *papilionacea* Pursh f. *papilionacea*, Common Violet - Castaner 8532 and *V. sororia* Willd., Woolly Blue Violet - *LaPlante 649*
1081 *V. rafinesquii* Greene, Field Pansy, [YT217], **S**: V. *kitaibeliana* R. & S. var. *rafinesquii* (Greene) Fern. - *Castaner 8538*

ELAEAGNACEAE (1)

1087 !**Elaeagnus angustifolia* L., Russian Olive - *LaPlante 654*

LYTHRACEAE (2)

1089 *Ammannia robusta* Heer & Regel, Tooth-cup, [YT141], **S**: (in part) *Ammannia coccinea* Rothb. - *Castaner 10086*
1092 **Cuphea viscosissima* Jacq., Clammy Cuphea, [YT141], **S**: *C. petiolata* (L.) Koehne - *LaPlante 826*

ONAGRACEAE (6)

1094 **Ludwigia peploides* (H.B.K.) Raven, Floating Primrose Willow, [YT153], **S**: *Jussiaea repens* L. var. *glabrescens* Ktze. - *Castaner 8560*
1099 **Epilobium coloratum* Biehler, Purple-leaved Willow Herb - *LaPlante 897*
1101 **Oenothera biennis* L., Common Evening Primrose, [YT154], **S**: var. *pycnocarpa* (Atkinson & Bartlett) Wieg. - *LaPlante 326*
1101 **O. villosa* Thunb. ssp. *villosa*, Common Evening Primrose, [YT155], **S**: *O. biennis* L. var. *hirsutissima* Gray - *Castaner 8595*
1102 *O. Laciniata* Hill, Cut-leaved Evening Primrose, [YT154], **S**: var. *laciniata* - *LaPlante 98*
1107 *Gaura parviflora* Doug., Velvety Gaura, [YT154], **S**: f. *glabra* Munz - *LaPlante 100*

APIACEAE (5)

1121 *Sanicula canadensis* L., Black Snakeroot
var. *canadensis* - *LaPlante 620*
1128 !*Torilis arvensis* (Hudson) Link, Hedge Parsely, [YT22], **S**: t. *japonica* (Houtt.) DC. - *Castaner 8568*
1130 **Spermolepis inermis* (Nutt.) Math. & Const., Scaleseed - *LaPlante 109*
1134 *Cryptotaenia canadensis* (L.) DC., Honewort - *LaPlante 792*
1148 *Daucus carota* L., Queen Anne's Lace
ssp. *carota* f. *carota*, [YT18], **S**: *D carota* L. f. *carota* - *Castaner 8601*

CORNACEAE (2)

1152 *Cornus drummondii* C. Meyer, Rough-leaved Dogwood - *Castaner 10062, 10059*
1152 **C. amomum* Miller, Swamp Dogwood
ssp. *obliqua* (Raf.) J. Wilson, [YT98], **S**: *C. obliqua* Raf. - *LaPlante 806*

PRIMULACEAE (1)

1171 **Anagallis arvensis* L., Poor Man's Weatherglass
*ssp. *arvensis*, [YT169], **S**: *A. arvensis* f. *caerulea* (Schreb.) Baumg. - *Castaner 8593*

OLEACEAE (3)

1179 *Fraxinus americana* L., White Ash
var. *americana* - *LaPlante 296*
1179 **F. biltmoreana* Beadle, Biltmore Ash, [YT151], **S**: *F. americana* var. biltmoreana (Beadle) J. Wright - *LaPlante 340*
1179 *F. pennsylvanica* Marsh., Green Ash, Red Ash, [YT151], **S**: Incl. *F. pennsylvanica* *var. *pensylvanica*, Red Ash - *LaPlante 812* and var. *subintegerrima* (Vahl.) Fern., Green Ash - *LaPlante 379*

APOCYNACEAE (3)

1200 *Apocynum cannabinum* L., Indian Hemp
var. *cannabinum* - *Castaner 8588, LaPlante 584*
1198 *A. sibiricum* Jacq., Indian Hemp
var. *sibiricum* - *LaPlante 377*
*var. *cordigerum* (Greene) Fern. - *LaPlante 464*

ASCLEPIADACEAE (3)

1204 *Asclepias incarnata* L., Swamp Milkweed

ssp. *incarnata*, [YT25], **S**: var. *incarnata* f. *incarnata* - *Castaner 8606*

1207 *A. syriaca* L., Common Milkweed, [YT26], **S**: var. *kansana* (Vail) Palmer & Steyerm. - *LaPlante 787*

1210 *Cynanchum laeve* (Michx.) Pers., Angle Pod - *Castaner 8584*

CONVOLVULACEAE (3)

1214 !*Ipomoea hederacea* Jacq., Blue Morning Glory, [YT97], **S**: var. *hederacea* - *LaPlante 636*

1217 **I. lacunosa* L., Small White Morning Glory, [YT97], **S**: f. *lacunosa* - *LaPlante 824*

1218 *Calystegia sepium* (L.) R. Br., Hedge Bindweed
ssp. angulata Brummitt, [YT96], **S**: *Convolvulus sepium* L. var. *sepium* f. *sepium* - *LaPlante 634*

BORAGINACEAE (2)

1247 **Lithospermum incisum* Lehm., Yellow Puccoon - *LaPlante 410*

1256 *Hackelia virginiana* (L.) I. M. Johnston, Beggar's Lice - *LaPlante 837*

VERBENACEAE (5)

1257 *Verbena urticifolia* L., White Vervain
var. *urticifolia* - *Castaner 8551, 10112*

1258 *V. hastata* L., Blue Vervain
f. *hastata* - *Castaner 10085*

1260 *V. stricta*, Hoary Vervain
f. *stricta* Vent. - *LaPlante 590*

1260 *V. bracteata* Lag. & Rodr., Creeping Vervain - *Castaner 8590, 10117*

1261 *Phyla lanceolata* (Michx.) E. Greene, Common Fog Fruit, [YT214], **S**: *Lippia lanceolata* Michx. - *LaPlante 112*

LAMIACEAE (10)

1273 **Scutellaria lateriflora* L., Mad-dog Skullcap
**f. lateriflora* - *Castaner 8572*

1279 *Prunella vulgaris* L., Self-heal
var. *lanceolata* (Bart.) Fern. f. *lanceolata* - *LaPlante 953*

1282 **Physostegia virginiana* (L.) Benth., False Dragonhead,
ssp. virginiana*, [YT135], **S: P. *formosior* Lunell - *LaPlante 799*

1285 !*Lamium amplexicaule* L., Henbit
f. *amplexicaule* - *Castaner 8538*

1286 **Stachys pilosa* Nutt., Woundwort, [YT138], **S**: S. *palustris* var. *nipigonensis* Jennings - *Castaner 8552, 8605*

1286 *S. tenuifolia* Willd., Thinleaf Betony, [YT138], **S**: var. *tenuifolia* - *LaPlante 173*
1288 **Salvia reflexa* Hornem., Lance-leaved Sage - *LaPlante 635*
1296 **Hedeoma pulegioides* (L.) Pers., Penny Royal - *Castaner 8577*
1302 *Lycopus americanus* Muhl., American Bugleweed, [YT133], **S**: var. *americanus* - *Castaner 8586*
1304 **Mentha arvensis* L., Field Mint, [YT133], **S**: var. *villosa* (Benth.) Stewart f. *villosa* - *LaPlante 896*

SOLANACEAE (4)

1312 *Solanum ptrycanthum* Dunal ex. DC, Black Nightshade, [YT209], **S**: *S. americanum* Mill. - *LaPlante 718*
1313 *S. carolinense* L., Horse Nettle, [YT209], **S**: f. *carolinense* - *LaPlante 97*
1318 *Physalis longifolia* Nutt., Common Ground Cherry
*var. *longifolia* - *LaPlante 717*
var. *subglabrata* (Mackenz. & Bush) Steyer. f. *subglabrata* - *LaPlante 720*

SCROPHULARIACEAE (9)

1333 **Leucospora multifida* (Michx.) Nutt., [YT202], **S**: *Conobea multifida* (Michx.) Benth. - *Castaner 10084, 10129*
1334 **Mimulus ringens* L., Allegheny Monkey Flower
*var. *ringens* - *Castaner 8571, 10088*
1336 *Lindernia dubia* (L.) Pennell, False Pimpernel, [YT202], **S** L. *anagallidea* (Michx.) Pennell - *Castaner 10087*
1339 *Verbascum thapsus* L., Mullein
f. *thapsus* - *LaPlante 587*
1346 *Scrophularia marilandica* L., Figwort
f. *marilandica* - *LaPlante 746*
1356 !*Veronica arvensis* L., Corn Speedwell - *LaPlante 426*
1357 *Dasistoma macrophylla* (Nutt.) Raf., Mullein Foxglove, [YT201], **S**: *Seymeria macrophylla* Nutt. - *LaPlante 700*
1360 **Agalinus tenuifolia* (Vahl) Raf., Slender Gerardia, [YT199], **S**: *Gerardia tenuifolia* Vahl. var. *tenuifolia* - *LaPlante 767*
1361 **Gerardia skinneriana* (A. Wood) Britt., Pale Gerardia - *LaPlante 322*

BIGNONIACEAE (1)

1370 !*Catalpa bignonioides* Walt., Southern Catalpa - *LaPlante 230*

LENTIBULARIACEAE (1)

1375 *Utricularia macrorhiza* Le Conte, Common Bladderwort, [YT139], **S**: U.

vulgaris L. - *LaPlante 453*

PLANTAGINACEAE (3)

1382 *Plantago rugelii* Dcne., Rugel's Plantain, [YT159], **S**: var. *rugelii* - *LaPlante 658*
1384 !*P. lanceolata* L., English Plantain
var. *lanceolata* - *LaPlante 240*
1385 *P. virginica*, Hoary Plantain, [YT159], **S**: var. *virginica* - *LaPlante 406*

RUBIACEAE (4)

1389 *Galium aparine* L., Cleavers - *LaPlante 499*
1386 **G. triflorum* Michx., Sweet Scented Bedstraw, [YT191], **S**: var. *triflorum* - *Castaner 10064*
1390 *G. circaezans* Michx., Wild Licorice
var. *hypomalacum* Fern. - *LaPlante 863*
1398 *Cephalanthus occidentalis* L., Buttonbush, [YT190], **S**: var. *occidentalis* - *Castaner 8559*

CAPRIFOLIACEAE (1)

1410 *Symphoricarpos orbiculatus* Moench, Buckbrush, Coralberry
f. *orbiculatus* - *LaPlante 942*

CUCURBITACEAE (1)

1428 **Sicyos angulatus* L., Bur Cucumber - *LaPlante 321*

CAMPANULACEAE (4)

1430 *Campanula americana* L., Tall Bellflower - *Castaner 10054*
1433 *Triodanis perfoliata* (L.) Nieuwl., Perfoliate Venus' Looking Glass, [YT79], **S**: *Specularia perfoliata* (L.) A. DC. f. *perfoliata* - *LaPlante 101*
1437**Lobelia siphilitica* L., Blue Cardinal Flower
*var. *siphilitica* f. *siphilitica* - *LaPlante 918*
*var. *ludovidiana* A. DC. - *LaPlante 777*

ASTERACEAE (42)

1461 *Vernonia fasciculata* Michx., Ironweed - *Castaner 7248*
1463 *Eupatorium purpureum*, Green-stemmed Joe-pye Weed - Castaner 10069
1463 **E. altissimum* L., Tall Throroughwort - *LaPlante 783*
1464 **E. perfoliatum* ., Boneset
*var. *perfoliatum* f. *perfoliatum* - *LaPlante 651*

1477 **Grindelia squarrosa* (Pursh) Dunal, Curlytop Gumweed
var. *serrulata* (Rydb.) Steyerm. - *LaPlante 622*
1496 **Solidago altissima* L., Tall Goldenrod
var. *altissima*, [YT55], **S**: *S. canadensis* L. var. *gilvocanescens* Rydb.; also in Great Plains Flora Association (1986), var. *scabra* T. & G. - *LaPlante 848*
var. *hargeri* Fern. - *Castaner 8952* are found in the wildlife area
1496 *S. gigantea* Ait., Late Goldenrod, [YT55], **S**: incl *var. *gigantea* - *LaPlante 883* and var. *leiophylla* Fern. - *LaPlante 795*
1502 *Boltonia asteroides* (L.) L'Her, False Starwort, Boltonia
var. *recognita* (Fern. & Grisc.) Cronq. - *LaPlante 711*
var. *latisquama* (Gray) Cronq. - *LaPlante 847*
1512 **Aster drummondii* Lindl., Drummond Aster - *LaPlante 307*
1516 **A. pilosus* Willd., White Heath Aster
*var. *pilosus* f. *pilosus* - *Castaner 8953*
1516 **A. parviceps* (Burgess) Mackenz. & Bush, Small White Aster - *LaPlante 778*
1518 *A. ericoides* L., Wreath Aster
f. *ericoides* - *LaPlante 870*
1523 **A. lanceolatus* Willd., Tall White Aster
*var. *latifolius* Semple & Chmielewski, [YT32], **S**: A. *simplex* Willd. var. *simplex* - *Castaner 8933, 8949*
1526 *Erigeron philadelphicus* L., Philadelphia Fleabane, [YT41], **S**: f. *philadelphicus* - *LaPlante 70*
1526 *E. annuus* (L.) Pers., Daisy Fleabane, [YT40], **S**: f. *annuus* - *LaPlante 308*
1528 *E. strigosus* Muhl., Daisy Fleabane
*var. *strigosus* [YT41], **S**: f. *strigosus* - *LaPlante 877*
var. *beyrichii* (Fisch. & Meyer), [YT41], **S**: var. *strigosus* f. *beyrichii* (Fisch. & May.) T. & G. - *LaPlante 957*
1529 *Conyza canadensis* (L.) Cronq., Horseweed, Canada Fleabane, [YT38], **S**: *Erigeron canadensis* L. - *LaPlante 776*
1538 *Ambrosia trifida* L., Giant Ragweed, [YT28], **S**: var. *trifida* f. *trifida* - *LaPlante 282*
1540 *A. artemisiifolia* L., Common Ragweed, [YT28], **S**: incl. var. *elatior* f. *elatior* - *LaPlante 779* and *var. *elatior* f. *villosa* - *LaPlante 612*
1543 *Xanthium strumarium* L., Common Cocklebur
*var. *glabratum* (DC.) Cronq., [YT60], **S**: X. *chinense* Mill. - *LaPlante 311*
var. *canadense* (Miller) T. & G., [YT60], **S**: *X. pensylvanicum* Wallr. - *LaPlante 903*
1554 **Eclipta prostrata* (L.) L., Yerba de Tajo, [YT40], **S**: E. *alba* (L.) Hassk. *Castaner 10074*
1558 *Rudbeckia hirta* L., Black-eyed Susan - *LaPlante 882*
1568 *Helianthus annuus* L., Common Sunflower, [YT44], **S**: var. *annuus* - *LaPlante 289*
1575 *H. tuberosus* L., Jerusalem Artichoke, [YT45], **S**: incl. *var. *tuberosus* - *LaPlante 781* and var. *subcanescens* Gray. - *LaPlante 327*

1578 **Verbesina alternifolia* (L.) Britt., Yellow Ironweed - *LaPlante 820*
1586 **Bidens cernua* L., Nodding Bur Marigold
*var. *cernua*, [YT34], **S**: f. *cernua* - *Castaner 8558, 9273*
1586 *B. tripartita* L., Swamp Beggar Ticks, [YT35], **S**: B. *connata* Muhl. var. *petiolata* (Nutt.) Farw. - *LaPlante 921*
1588 **B. discoidea* (T. & G) Britt., Sticktight - *LaPlante 817*
1590 **B. aristosa* (Michx.) Britt., Tickseed Sunflower
*f. *aristosa*, [YT34], **S**: B. *polylepis* S. F. Blake *var. *polylepis* f. *polylepis* - *LaPlante 935*
1620 !**Carduus nutans* L., Musk thistle - *LaPlante 99*
1621 *Cirsium vulgare* (Savi) Tenore, Bull Thistle - *LaPlante 906*
1621 **C. discolor* (Muhl.) Spreng., Field Thistle
*f. *discolor* - *LaPlante 789*
1622 **C. altissimum* (L.) Spreng., Tall Thistle
*f. *altissimum* - *LaPlante 818*
1634 !*Tragopogon dubius* Scop., Goat's Beard - *LaPlante 413*
1635 !*Taraxacum officinale* Wiggers, Common Dandelion - *LaPlante 422*
1638 !*Lactuca* serriola L., Prickly Lettuce
f. *serriola*, [YT48], **S**: *L. scariola* L. f. *scariola* - *Castaner 10116*
*f. *integrifolia* (Gray) Prince & R. Carter, [YT48], **S**: f. *integrifolia* (Bogenh.) G. Beck - *Castaner 8569*
1642 **L. floridana* (L.) Gaertn., Blue Lettuce
*var. *floridana* f. *floridana* - *LaPlante 690*
1646 *Pyrrhopappus carolinianus* (Walt.) DC., False Dandelion - *LaPlante 113*

ACKNOWLEDGEMENTS

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CHICKEN SPIKE (*SPHENOCLEA ZEYLANICA*, CAMPANULACEAE), NEW TO MISSOURI

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2610 Shady Lane
Poplar Bluff, MO 63901

A recent field trip to the rice fields of southeastern Missouri yielded an interesting new plant record for the state. *Sphenoclea zeylanica* Gaertner, known as Chicken Spike or Gooseweed (Figure 1), was discovered growing in Butler County. About a dozen mature plants and several seedlings were growing at the edge of a flooded rice field that drains into a ditch eventually flowing into the Black River. The site is located south of Poplar Bluff on the north side of County Road 320 about 1/4 mile east of State Highway 142, at SE 1/4 sec. 33, T. 24 N, R. 6 E. Associates include several species of *Heteranthera* and a variety of other emergent aquatics. Flowering and fruiting voucher specimens (Hudson s.n.) were collected on 22 August and 2 September, 1992, and are deposited at the Missouri Botanical Garden Herbarium (MO). A suggested map number for the Missouri Flora Atlas Project is 2105.09. Since this first collection, additional localities have been located in other rice fields in Butler County and in Ripley County.

Gooseweed is an erect herb to ca. 2 m tall, much-branched above, with hollow, slightly succulent stems and alternate leaves. There is disagreement as to whether the species is an annual or short-lived perennial, a situation not uncommon in discussions of aquatic herbs. The small actinomorphic flowers occur in dense terminal spikes. The white petals are fused together in the lower half of the corolla. Fruits develop from inferior ovaries, and are obconic, circumscissile capsules with two locules and numerous tiny seeds.

Sphenoclea zeylanica grows in moist soil or shallow water. Ward (1978) suggested that populations often do not persist for many years at individual sites. It is native to the Old World tropics (Rosatti, 1986), but has become widely naturalized in the New World, usually as a weed in rice fields. In the United States, it occurs nearly throughout the southeastern states, from Florida to South Carolina, and westward to Texas. Smith (1988) reported the species from fifteen counties in Arkansas, the closest being Greene County, which is less than 50 km from the Missouri population. It is to be expected in other Missouri Counties where rice is grown.

Sphenoclea, which is variously thought to contain one or two species, is often included as the tribe Sphenocleeae of Campanulaceae, but is sometimes treated as the segregate family, Sphenocleaceae (Rosatti, 1986). Although the plants are usually referred to as weeds, they are far more benign than many species given that designation. The leaves are edible and are eaten with rice in

Java and elsewhere (Uphof, 1968). Interestingly, the roots of living plants produce an exudate that controls the rice-root nematode, a commercially important pest of rice crops (Mohandas et al., 1981).

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MISSOURI
BOTANICAL GARDEN
HERBARIUM
№ 4074378
Sheet 2 of 2
MISSOURI DEPARTMENT OF CONSERVATION
FLORA OF MISSOURI PROJECT
Sphenoclea zeylanica Gaertner
BUTLER COUNTY: N side of County Road
#320, ¼ mi E of State Highway 142, S of
Poplar Bluff; T24N R6E S33 SE¼; drain
corner of rice field, in up to 30 cm of
water; plants to 1.5 m tall.
5 September 1992
S. Hudson
s.n.
SHEET 2 OF 2
MISSOURI BOTANICAL GARDEN HERBARIUM (MO)

Figure 1. Xerograph of *Sphenoclea zeylanica* Gaertner.

MISSOURI BOTANICAL RECORD 15

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The *Missouri Botanical Record* is the official register for new county records of all vascular plant taxa in Missouri. To qualify for inclusion in this record, a voucher specimen of the record taxon must be deposited in a recognized herbarium and verified by the curator. Following the format used below, please submit all records to Dr. Wallace R. Weber, Department of Biology, Southwest Missouri State University, Springfield, MO 65804-0095.

In the *Flora of Missouri*, Steyermark used only a single map number to refer to each species, even though several subspecific taxa were listed. In these instances, various symbols were used to represent each taxon on a single Missouri map with counties. In the *Missouri Botanical Record* a decimal system is used, with .1 assigned to the first subspecific taxon listed by Steyermark, .2 for the second, and so on. Point nine nine (.99) is used to designate a species in which Steyermark included one or more subspecific taxa, but which was not specified by the collector. Point zero nine (.09) identifies a taxon not included respectively.

Contributors for this issue are Pat Walker and George Yatskievych.

TAXA	COUNTY	COLLECTOR	HERB	MAP NO
		Lycopodiaceae		
Lycopodium lucidulum	Howell	*Summers 3224*	MO	2.00
		Isoetaceae		
Isoetes melanopoda	Montgomery	*Schuette 2029*	MO	8.00
Isoetes butleri	Madison	*Summers 3171*	MO	9.00
		Equisetaceae		
Equisetum laevigatum	Howell	*Summers 3390*	MO	12.00
Equisetum hyemale	Howard	*Summers 2739*	MO	13.00
		Ophioglossaceae		
Ophioglossum vulgatum v. pseudopodium	Madison	*Summers 2922*	MO	16.00
		Polypodiaceae		
Azolla mexicana	Stoddard	*Summers 3923*	MO	19.00
Polypodium polypodioides v. michauxianum	Madison	*Summers 2926*	MO	36.00
Asplenium bradleyi	Ste. Genevieve	*Summers 3112*	MO	48.00
Dryopteris goldiana	Texas	*Sumers & Ryan 3857*	MO	60.00
Dryopteris goldiana	Wright	*Summers 3538*	MO	60.00
		Typhaceae		
Typha angustifolia	Vernon	*Chang 554*	MO	70.00
		Sparganiaceae		
Sparganium androcladum	Howell	*Summers 3694*	MO	73.00
		Najadaceae		
Potamogeton crispus	Franklin	*Solomon 18796*	MO	76.00

Potamogeton pusillus	Scotland	*Brant & O'Donnell 1884*	MO	78.99
Potamogeton nodus	Hickory	*Summers 2830*	MO	83.00
Potamogeton nodosus	Bates	*Summers 2826*	MO	83.00
Zanichellia palustris	Mercer	*Summers 2809*	MO	86.00
Najas gracillima	Lincoln	*Schuette s.n.*	MO	87.00
	Alismaceae			
Echinodorus berteroi v. berteroi	Stoddard	*Summers 3082*	MO	92.00
Sagittaria calycina	Grundy	*Summers 2821*	MO	94.00
Sagittaria engelmanniana spp. breviorstra	Texas	*Summers & Ryan 3608*	MO	98.00
	Hydrocharitaceae			
Limnobium spongia	Stoddard	*Summers 3922*	MO	103.00
	Gramineae			
Bromus latiglumis	Oregon	*Summers 3007*	MO	108.99
Bromus tectorum	McDonald	*Smith & Yatskievych 3047*	MO	116.00
Bromus tectorum	Howell	*Summers 2694*	MO	116.00
Festuca paradoxa	Oregon	*Summers 2988*	MO	122.00
Poa compressa	Vernon	*Chang 418*	MO	133.00
Eragrostis hypnoides	Mercer	*Summers 2810*	MO	143.00
Eragrostis pectinacea	Oregon	*Summers 3096*	MO	147.00
Diarrhena americana	Gasconade	*Brant et al. 1922*	MO	159.99
Diarrhena americana	Texas	*Summers & Ryan 3591*	MO	159.99
Phragmites australis	Stoddard	*Summers 3101*	MO	166.00
Sphenopholis nitida	Madison	*Brant 1838*	MO	197.00
Calamagrostis insperata	Howell	*Summer & Dodds 3710*	MO	208.00
Calamagrostis insperata	Shannon	*Summers 3919*	MO	208.00
Calamagrostis insperata	Texas	*Summers & Ryan 3602*	MO	208.00
Calamagrostis insperata	Wright	*Summers & Ryan 3907*	MO	208.00
Phleum pratense	Vernon	*Chang 512*	MO	221.00
Phleum pratense	Howard	*Summers 2738*	MO	221.00

Muhlenbergia cuspidata	Carter	*Summers & MONPS 3778*	MO	222.00
Sporobolus vaginiflorus	Callaway	*Brant & Gereau 1820*	MO	233.00
Sporobolus heterolepis	Howell	*Summers 3502*	MO	238.00
Aristida dichotoma v. dichotoma	Howell	*Summers 3810*	MO	247.00
Aristida oligantha	Gasconade	*Brant et al. 1918*	MO	248.00
Aristida longispica v. longispica	Gasconade	*Brant et al. 1920*	MO	250.00
Eleusine indica	Texas	*Summers 3672*	MO	256.00
Gymnopogon ambiguus	Howell	*Summers 3084*	MO	261.00
Phalaris caroliniana	Vernon	*Chang 471*	MO	270.00
Phalaris arundinacea	St. Louis	*Summers 2700*	MO	271.00
Phalaris aruninacea	Crawford	*Brant 1809*	MO	271.00
Leersia oryzoides	Texas	*Summers 3760*	MO	274.99
Leersia virginica	Howell	*Summers 3682A*	MO	271.00
Paspalum floridanum v. glabratum	Newton	*Smith & Yatskievych 3018*	MO	295.10
Panicum linearifolium	Audrian	*Summers 2727*	MO	298.99
Panicum laxiflorum	Perry	*Brant, Noyes, & Carter 1907*	MO	299.00
Panicum oligosanthes v. scribnerianum	Gasconade	*Brant et. al. 1927*	MO	315.2
Panicum philadelphicum	Oregon	*Summers 3097*	MO	328.99
Echinochloa muricata	Howell	*Summers 3806*	MO	339.99
Setaria italica	Callaway	*Brant & Gereau 1838*	MO	345.00
Setaria Italica	Gasconade	*Brant et al. 1927*	MO	345.00
Cenchrus longispinus	Ripley	*Summers 3032*	MO	346.00
Andropogon scopararium	Shannon	*Summers 3775*	MO	352.00
Andropogon scoparium	Butler	*Summers 3883*	MO	352.00
Andropogon scoparium	Carter	*Summers 3883*	MO	352.00
Andropogon scoparium	Oregon	*Summers & Dodds 3921*	MO	352.00
Andropogon scopariuim	Stoddard	*Summers 3924*	MO	352.00
Andropogon ternarius	Texas	*Summers 3740*	MO	354.00
Andropogon elliottii	Texas	*Summers & Ryan 3796*	MO	356.00
Andropogon saccharoides	Howell	*Summers 3741*	MO	357.00

Cyperaceae

Cyperus aristatus	Wright	*Summers 3407*	MO	368.00
Cyperus iria	Ripley	*Summers 3031*	MO	373.00

Cyperus esculentus v. esculentus f. angustispicatus	Vernon	*Chang 602*	MO	378.10
Cyperus strigosus	Howell	*Summers 3474*	MO	379.99
Cyperus strigosus	Callaway	*Brant & Gereau 1826*	MO	379.00
Cyperus lancastriensis	New Madrid/ Scott line	*Carter 8277*	MO	381.00
Cyperus filiculmis	Scotland	*Brant & O'Donnell 1875*	MO	385.99
Eleocharis acicularis	St.Charles	*Carter et al. 7957*	MO	393.00
Eleocharis obtusa v. obtusa	Wright	*Summers 3439*	MO	396.00
Eleocharis macrostachya	Wright	*Summers 3838*	MO	399.00
Bulbostylis capillaris	Texas	*Summers 3840*	MO	403.00
Bulbostylis capillaris	Wright	*Summers 3435A*	MO	403.00
Fimbristylis caroliniana	Howell	*Summers 3267*	MO	404.00
Scirpus verecundus	Howell	*Summers 3212*	MO	408.00
Scirpus koilolepis	Howell	*Summers 3283*	MO	409.00
Scirpus koilolepis	Howell	*Summers 3283*	MO	409.00
Scirpus acutus	Howell	*Summers 3476*	MO	416.00
Scirpus atrovirens v. georgianus	Stoddard	*Summers 3051*	MO	421.2
Scirpus atrovirens	Jefferson	*Miller 5214*	MO	421.99
Scirpus lineatus	Vernon	*Chang 470*	MO	424.00
Scirpus cyperinus	Texas	*Summers & Ryan 3765*	MO	425.99
Hemicarpa micrantha	Texas	*Summers & Ryan 3759*	MO	429.00
Rhynchospora corniculata v. corniculata	Howell	*Summers 2837*	MO	431.00
Scleria pauciflora	Howell	*Summers 3465*	MO	439.99
Scleria pauciflora	Oregon	*Summers 2996*	MO	439.99
Scleria ciliata v. ciliata	Perry	*Brant, Carter, & Noyes 1902*	MO	440.00
Carex rosea	Audrain	*Summers 2723*	MO	448.00
Carex cephalophora	Crawford	*Brant & O'Donnell 1791*	MO	449.99
Carex cephalophora	Linn	*Summers & Dodds 3413*	MO	449.99
Carex cephalospora	Perry	*Carter, Brant & Noyes 7904*	MO	449.99
Carex leavenworthii	Howell	*Summers 3380*	MO	450.00
Carex muhlenbergii v. muhlenbergii	Howell	*Summers 3234*	MO	452.00
Carex muhlenbergii v. australis	McDonald	*Smith & Yatskievych 3022*	MO	452.20

Carex muhlenbergii	Audrain	*Summers 2719*	MO	452.99
Carex gravida v. gravida	Scotland	*Summers 2708A*	MO	453.99
Carex aggregata	Calloway	*Brant et al. 1776*	MO	454.00
Carex vulpinoidea	Oregon	*Summers 2992*	MO	456.00
Carex annectens	Jefferson	*Miller et al. 5020*	MO	457.99
Carex annectens	Audrain	*Summers 2720*	MO	457.99
Carex oklahomensis	Howell	*Summers 3295*	MO	460.00
Carex stipata	Vernon	*Chang 115*	MO	461.99
Carex stipata	Howell	*Summers 3249*	MO	461.99
Carex stipata	Knox	*Summers 2709A*	MO	461.99
Carex scoparia	Linn	*Summers & Dodds 3412*	MO	467.99
Carex projecta	Crawford	*Brant & O'Donnell 1792*	MO	469.00
Carex cristatella	Pike	*Brant & O'Donnell 1865*	MO	470.00
Carex tenera	Crawford	*Brant & O'Donnell 1795*	MO	472.00
Carex tenera	Madison	*Brant & O'Donnell 1844*	MO	472.00
Carex tenera	Howell	*Summers 3314*	MO	472.00
Carex festucacea	Madison	*Brant & O'Donnell 1845*	MO	473.00
Carex festucacea	Howell	*Summers 3256*	MO	473.00
Carex festucacea	Madison	*Summers 2916*	MO	473.00
Carex brevior	Butler	*Summers 3448*	MO	476.00
Carex molesta	Crawford	*Brant 1808*	MO	477.00
Carex molesta	Osage	*Brant & O'Donnell 1854*	MO	477.00
Carex molesta	Audrain	*Summers 2718*	MO	477.00
Carex molesta	Boone	*Summers 2731*	MO	477.00
Carex Bicknellii	Howell	*Summers 3265*	MO	478.00
Carex alata	Texas	*Summers 3747*	MO	479.00
Carex leptalea	Madison	*Summers 2917*	MO	481.00
Carex jamesii	Osage	*Brant & O'Donnell 1857*	MO	482.00
Carex jamesii	Howell	*Summers 3227*	MO	482.00
Carex jamesii	Madison	*Summers 2913*	MO	482.00
Carex jamesii	Pike	*Miller, Brant, & Pool 4930*	MO	482.00
Carex artitecta	Calloway	*Brant & Gereau 1773*	MO	483.00
Carex hirtifolia	Crawford	*Brant & O'Donnell 1794*	MO	492.00
Carex digitalis	Miller	*Currier 90 024*	MO	497.00

Carex blanda	Madison	*Summers 2911*	MO	500.00
Carex granularis	Madison	*Summers 2912*	MO	502.99
Carex amphibola v. turgida	Howell	*Summers 3272*	MO	508.20
Carex amphibloa	Madison	*Summers 2914*	MO	508.99
Carex flaccosperma v. glaucodea	Camden	*Brooks & Wang 19.716*	MO	509.10
Carex flaccosperma v. glaucodea	Audrain	*Summers 2722*	MO	509.10
Carex davisii f.davisii	Butler	*Summers & Dodds 3360*	MO	512.00
Carex davisii	Howard	*Summers 2735*	MO	512.99
Carex davisii	Howell	*Summers 3266*	MO	512.99
Carex davisii	Perry	*Carter,Brant, & Noyes 7901*	MO	512.99
Carex complanata v. hirsuta	Oregon	*Summers 3006*	MO	517.10
Carex caroliniana	Perry	*Brant & Noyes 7902*	MO	518.00
Carex caroliniana	Vernon	*Chang 118*	MO	518.00
Carex bushii	Madison	*Summers 2925*	MO	519.00
Carex bushii	Wright	*Summers 3400*	MO	519.00
Carex shortiana	Butler	*Summers & Dodds 3196*	MO	522.00
Carex shortiana	Madison	*Summers 2906*	MO	522.00
Carex emoryi	Madison	*Summers 2925*	MO	528.00
Carex stricta v. strictior	Vernon	*Chang 353*	MO	529.00
Carex stricta v. strictior	Howell	*Summers 3225*	MO	529.00
Carex hystricina	Crawford	*Brant 1810*	MO	532.00
Carex hystricina	Howell	*Summers 3273*	MO	532.00
Carex hystricina	Madison	*Summers 2932*	MO	532.00
Carex lurida	Butler	*Summers & Dodds 3358*	MO	534.00
Carex squarrosa	Vernon	*Chang 482*	MO	542.00
Carex typhina	Texas	*Summers 3748*	MO	543.00
Carex lupulina	Vernon	*Chang 636*	MO	548.10

Lemnaceae

Lemna minor	Oregon	*Summers & Reed 3938*	MO	558.00
Lemna minor	Osage	*Brant & Miller 1860*	MO	558.00
Lemna minima	Shannon	*Nigh 627*	MO	559.00

		Commelinaceae		
Commelina diffusa	Calloway	*Brant & Gereau 1824*	MO	577.00
		Pontederiaceae		
Heteranthera limosa	Texas	*Summers 3581*	MO	583.00
Heteranthera limosa	Callaway	*Summers 2832*	MO	583.00
Heteranthera dubia	Mercer	*Summers 2805*	MO	584.00
		Juncaceae		
Juncus interior	Douglas	*Smith 2899*	MO	591.00
Juncus interior	Stoddard	*Summers 3048*	MO	591.00
Juncus dudleyi	Vernon	*Chang 420*	MO	592.00
Juncus marginatus v. marginatus	Wright	*Summers & Ryan 3544*	MO	593.00
Juncus marginatus	Wright	*Summers & Ryan 3543*	MO	593.99
Juncus subcaudatus	Texas	*Summers et al. 3916*	MO	596.00
Juncus torreyi	Audrain	*Summers 2726*	MO	601.00
Juncus torrey	Madison	*Summers 3063*	MO	601.00
Juncus torreyi	Stoddard	*Summers 3047*	MO	601.00
Juncus acuminatus	Vernon	*Chang 483*	MO	602.00
		Liliaceae		
Amianthium muscitoxicum	Howell	*Summers 3231*	MO	608.00
Stenanthium gramineum	Howell	*Summers 2940*	MO	609.00
Allium sativum	St.Francois	*Miller, Merello, & Schmidt 5413*	MO	617.00
Hemerocallis fulva	Vernon	*Chang 193*	MO	626.99
Lilium michiganense	Perry	*Brant, Carter, & Noyes 1898*	MO	627.00
Camassia scilloides	Vernon	*Chang 385*	MO	631.99
Yucca smalliana	Vernon	*Chang 562*	MO	637.00
Asparagus officinalis	Phelps	*Summers 2937A*	MO	639.00
Polygonatum biflorum	Ste. Genevieve	*Haller & Molyneaux 13*	MO	642.00

Polygonatum biflorum	Crawford	*Miller, Meyers, & Rohrback 4918*	MO	642.00
Trillium viride	Crawford	*Miller, Meyers, & Rohrbach 4915*	MO	646.00
Smilax tamnoides v. hispida	Lincoln	*Miller, Noyes, & Pool 5427*	MO	655.00
		Amaryllidaceae		
Hypoxis hirsuta	Vernon	*Chang 364*	MO	663.00
		Iridaceae		
Iris cristata	Howell	*Summers 3514*	MO	666.00
Sisyrinchium albidum	Vernon	*Chang 358*	MO	677.00
Sisyrinchium compestre f. kansanum	Vernon	*Chang 410*	MO	678.10
Sisyrinchium bermudiana	Vernon	*Chang 126*	MO	679.00
		Orchidaceae		
Spiranthes tuberosa	Madison	*Summers 2754*	MO	699.00
Spiranthes tuberosa v. tuberosa	Butler	*Summers 3073*	MO	699.00
Spiranthes tuberosa	Pulaski	*Figg s.n.*	MO	699.00
Spiranthes gracilis	Ripley	*Summers 3616*	MO	700.00
Spiranthes gracilis	Gasconade	*Brant et al. 1919*	MO	700.00
Spiranthes vernalis	Butler	*Summers 3363*	MO	701.00
Spiranthes vernalis	Wright	*Summers 3435*	MO	701.00
Spiranthes cernua	Stoddard	*Summers 3108*	MO	702.00
Spiranthes cernua	Wright	*Summers et.al 3897*	MO	702.99
Spiranthus cernua	Macon	*Hein 44*	MO	702.99
Spiranthes ovalis	Livingston	*Kramer s.n.*	MO	703.00
Spiranthes ovalis	Oregon	*Summers 3100*	MO	703.00
Goodyera pubescens	Texas	*Summers & Ryan 3579*	MO	705.00
Goodyera pubescens	Madison	*Summers 2937*	MO	705.00
Corallorhiza odontorhiza f.odontorhiza	Butler	*Summers & Dodd 3072*	MO	708.00
Corallorhiza odontorhiza f. odontorhiza	Howell	*Summers 3704*	MO	708.00
Corallorhiza odontorhiza f. odontorhiza	Texas	*Summers*		

		& Ryan 3657	MO	708.00
Aplectrum hyemale	Dunklin	*Pelton s.n.*	MO	712.00
Aplectrum hyemale	Oregon	*Summers 283*	MO	712.00
Aplectrum hyemale	Ripley	*Summers 2836*	MO	712.00
		Salicaceae		
Salix interior	Jefferson	*Chandler 1575*	MO	721.99
Salix humilis	Camden	*Currier 90 616*	MO	725.99
Populus deltoides	Randolph	*Petton s.n.*	MO	737.99
		Ulmaceae		
Planera aquatica	Stoddard	*Summers & Dodd*	MO	783.00
Celtis laevigata	Franklin	*Berg 108*	MO	786.99
		Urticaceae		
Urtica diocia v. procera	Lewis	*Brant & O'Donnell 1867*	MO	794.00
Parietaria pensylvanica	St.Louis	*Merello 4999*	MO	800.99
		Santalaceae		
Comandra richardsiana	Bates	*Broadhead s.n.*	MO	802.00
Comandra richardsiana	Ste. Genevieve	*Mohlenbrock 21312*	MO	802.00
		Polygonaceae		
Rumex patientia	St.Louis	*Muehlenbach 3080*	MO	812.00
Rumex stenophyllus	St.Louis	*Muehlenbach 4258*	MO	814.09
Rumex pulcher	Platte	*Currier 193*	MO	816.00
Rumex obtusifolius	Ste. Genevieve	*Mohlenbrock 21267*	MO	817
Rumex obtusifolius	Barry	*Hornberger 368*	MO	817.00
Rumex obtusifolius	Bates	*Delozier 1605*	MO	817.00
Polygonum ramosissimum f. ramosissimum	Pettis	*Henderson 67-1634*	MO	820.00
Polygonum erectum	Pulaski	*Summers 1560*	MO	821.00
Polygonum arenastrum	New Madrid	*Gereau & Brant 2356*	MO	823.09

Polygonum aviculave	Barton	*Delozier 1627*	MO	823.99
Polygonum aviculave	Cole	*Delozier 1938*	MO	823.99
Polygonum tenue	Cass	*Smith 2651*	MO	824.00
Polygonum tenue	Lawrence	*Summers 1574*	MO	824.00
Polygonum tenue	Stone	*Smith 2800*	MO	824.00
Polygonum coccineum	Dade	*R. & A. Collett 27*	MO	826.99
Polygonum densiflorum	St.Charles	*Raechal & Brant 33*	MO	827.00
Polygonum pensylvanicum	Warren	*Gereau et al. 1844*	MO	829.99
Polygonum hydropiper	Dade	*R. & A. Collett 363*	MO	832.00
Polygonum hydropiper	Franklin	*Berg 19*	MO	832.00
Polygonum hydropiper	Ste. Genevieve	*Mohlenbrock 21330*	MO	832.00
Polygonum hydropiper	Vernon	*Chang 284*	MO	832.00
Polygonum cespitosum	Monroe	*Hudson 149*	MO	832.10
Polygonum persicaria	Callaway	*Gereau 2341*	MO	833.00
Polygonum persicaria	Crawford	*Faber-Langendoen 131*	MO	833.00
Polygonum persicaria	Jefferson	*Saunders et al:7877*	MO	833.00
Polygonum persicaria	St. Charles	*Davidse, Bell & Niblett 83*	MO	833.00
Polygonum persicaria	Ste. Genevieve	*Mohlenbrock 21277*	MO	833.00
Polygonum punctatum	Scotland	*Brant & O'Donnell 988*	MO	834.99
Polygonum punctatum	Warren	*Steyermark 132, 190*	MO	834.99
Polygonum hydropiperoides	Dade	*R. & A. Collett 64*	MO	835.99
Polygonum hydropiperoides	NewMadrid	*Brant & Gereau 1122*	MO	835.99
Polygonum sagittatum	Texas	*Summers & Ryan 3769*	MO	836.00
Polygonum virginianum	Dade	*R. & A. Collett 65*	MO	838.99
Polygonum convolvulus	Bates	*Henderson 68-703*	MO	839.00
Polygonum convolvulus	Holt	*McGregor 37119*	MO	839.00
Polygonum cuspidatum	St.Louis	*Muehlenbach 3476*	MO	841.00

Chenopodiaceae

Chenopodium botrys	Howell	*Summers 1853*	MO	848.00
Chenopodium botrys	Texas	*Summers & Ryan 3771*	MO	848.00

Chenopodium ambrosoides	St.Francois	*Lewis 7088*	MO	849.99
Chenopodium desiccatum v. desiccatum	St.Louis	*Muhlenbach 1794*	MO	853.00
Chenopodium album	Jefferson	*Brant et al. 760*	MO	860.99
Chenopodium album	Ste. Genevieve	*Mohlenbrock s.n.*	MO	860.99
Chenopodium berlandieri	Lincoln/ Pike	*Brant & O'Donnell 1018*	MO	863.99
	Portulacaceae			
Portulaca oleracea	Morgan	*Delozier 1735*	MO	900.00
Claytonia virginica	Warren	*Raechal & Steyermark*	MO	905.99
Talinum parviflorum	Washington	*Brant et al. 927*	MO	906.00
	Ranunculaceae			
Delphinium tricorne	Holt	*McGregor 36909*	MO	972.00
Delphinium carolinianum	Ripley	*Ayers s.n.*	MO	975.99
Delphinium virescens v. penardi	Buchanan	*Delozier & Ellis 7038*	MO	976.10
Delphinium virescens v. penardi	Lafayette	*Henderson 68-190*	MO	976.10
Delphinium virescens v. penardi	Polk	*Currier 89-032*	MO	976.10
Delphinium virescens v. penardi	Vernon	*Chang 495*	MO	976.10
Isopyrum biternatum	Holt	*McGregor 36912*	MO	977.00
Isopyrum biternatum	Ste. Genevieve	*Mohlenbrock 10335*	MO	977.00
Ranunculus longirostris	Carter	*Nellums et al. 90-388*	MO	978.00
Ranunculus laxicaulis	Vernon	*Chang 443*	MO	979.00
Ranunculus abortivus	Vernon	*Chang 377*	MO	982.99
Ranunculus micranthus	Audrain	*Brant et al. 1779*	MO	983.99
Ranunculus micranthus	Iron	*Solomon 5803*	MO	983.99
Ranunculus micranthus	Ste. Genevieve	*Mohlenbrock 10355*	MO	983.99
Ranunculus micranthus	Clinton	*Henderson 65-154*	MO	983.99
Ranunculus harveyi	Hickory	*Henderson 68-103*	MO	984.99
Ranculus recurvatus	Montgomery	*Schuette 1426*	MO	987.00
Ranunculus sardous	Perry	*Brant et al. 1911*	MO	995.10
Ranunculus sardous	Wayne	*Summers 2744*	MO	995.10

Ranunculus sardous	Wright	*Summers & Ryan 3877*	MO	995.10
Myosurus minimus	Johnson	*Delozier 1655*	MO	997.00
Myosurus minimus	Cass	*Delozier 1654*	MO	997.00
Myosurus minimus	Holt	*McGregor 36887*	MO	997.00
Anemone virginiana	Monroe	*Hudson 594*	MO	1000.99
Anemone virginiana	St.Francois	*Mazanec 21*	MO	1000.99
Anemone canadensis	Perry	*Brant et al. 1899*	MO	1001.00
Clematis virginiana	Carroll	*Delozier 1397*	MO	1004.99
Clematis pitcheri	Lincoln	*Brant et al. 595*	MO	1008.00
Clematis pitcheri	McDonald	*Yatskievych & Smith 90-224*	MO	1008.00

Resedaceae

Reseda luteola	St.Louis	*Muehlenbach 3931*	MO	1110.00

Crassulaceae

Sedum ternatum	Oregon	*Summers 3099*	MO	1114.00
Sedum ternatum	Texas	*Summmers & Ryan 3774*	MO	1114.00

Saxifragaceae

Penthorum sedoides	Barry	*Hornberger 782*	MO	1116.00
Saxifraga texana	Lawrence	*Smith 2665*	MO	1119
Heuchera americana v. hirsuticaulis	Ste. Genevieve	*Mohlenbrock 21294*	MO	1124.10
Heuchera americana	Ralls	*Hudson 58*	MO	1124.99
Heuchera americana	Stoddard	*Summers 2862*	MO	1124.99
Heuchera richardsoni v. grayana	Clinton	*Currier s.n.*	MO	1125.00
Heuchera richardsonii	Carroll	*Summers 2890*	MO	1125.99

Rosaceae

Pyrus communis	Calloway	*Brant et al. 1778*	MO	1146.00
Pyrus communis	Madison	*Summers 3156*	MO	1146.00
Pyrus malus	Audrain	*Brant et al. 1780*	MO	1147.00
Pyrus angustifolia	Shannon	*Summers 2835A*	MO	1148.00
Pyrus angustifolia	Stoddard	*Summers 2858*	MO	1148.00
Pyrus coronaria	Stoddard	*Summers 2869*	MO	1149.00

Pyrus ioensis	Lewis	*Brant & O'Donnell 1868*	MO	1150.00
Crataegus marshallii	Webster	*Smith 2537*	MO	1156.00
Crataegus uniflora x C. engelmannii	Douglas	*Smith 2851*	MO	1157.10
Crataegus neobushii	Barry	*Smith 2802*	MO	1158.00
Crataegus neobushii	Douglas	*Smith 2924*	MO	1158.00
Crataegus viridis	Shelby	*Brant & O'Donnell 1891*	MO	1162.99
Crataegus viridis	NewMadrid	*Gereau & Brant 2355*	MO	1162.99
Crataegus viridis	St.Charles	*Brant & Gereau 963*	MO	1162.99
Crataegus margaretta	Howell	*Summers 3219*	MO	1165.00
Crataegus crus galli	Perry	*Brant et al. 1904*	MO	1167.99
Crataegus crus galli	Greene	*Smith 3009*	MO	1167.99
Crataegus engelmannii	Ripley	*Smith & Nigh 2442*	MO	1177.99
Crataegus pruinosa	Lincoln	*Schuette 1408*	MO	1191.99
Crataegus pruinosa	Osage	*Brant & O'Donnell 1915*	MO	1191.99
Crataegus gattingeri	Perry	*Brant et al. 1906*	MO	1193.00
Crataegus calpodendron	Howell	*Summers 3242*	MO	1200.99
Fragaria virginiana v. illinoensis	Vernon	*Chang 415*	MO	1205.10
Fragaria virginiana	Camden	*Henderson 68-122*	MO	1205.99
Fragaria virginiana	Hickory	*Henderson 68-79*	MO	1205.99
Fragaria virginiana	Holt	*McGregor 36903*	MO	1205.99
Fragaria virginiana	Monroe	*Hudson 26*	MO	1205.99
Fragaria virginiana	Polk	*Henderson 68-97*	MO	1205.99
Fragaria virginiana	St.Louis	*Muehlenbach 3225*	MO	1205.99
Potentilla simplex	Jefferson	*Miller 5019*	MO	1209.99
Potentilla simplex	Vernon	*Chang 91*	MO	1209.99
Potentilla norvegica	Holt	*Delozier 2045*	MO	1211.00
Potentilla norvegica	Lafayette	*Delozier 1354*	MO	1211.00
Potentilla norvegica	Monroe	*Hudson 234*	MO	1211.00
Potentilla rivalis v. millegrana	Platte	*Henderson 68 377*	MO	1212.10
Potentilla rivalis	Ray	*Henderson 68-224*	MO	1212.99
Potentilla recta	Andrew	*Henderson 68-412*	MO	1215.00
Potentilla recta	Bates	*Henderson 69-180*	MO	1215.00
Potentilla recta	Cass	*Henderson 66-413*	MO	1215.00
Potentilla recta	Chariton	*Henderson 68-308*	MO	1215.00
Potentilla recta	Clinton	*Henderson 68-523*	MO	1215.00
Potentilla recta	Howard	*Henderson 68-287*	MO	1215.00
Potentilla recta	Monroe	*Hudson 46*	MO	1215.00

Potentilla recta	St.Charles	*Davidse, Bell, & Niblett 198B*	MO	1215.00
Filipendula rubra	Howell	*Summers & Ryan 3712*	MO	1217.00
Filipendula rubra	St.Francois	*Christ 126*	MO	1217.00
Geum vernum	Johnson	*Oskins 98*	MO	1218.00
Geum vernum	Monroe	*Hudson 405*	MO	1218.00
Geum vernum	Ralls	*Hudson 189*	MO	1218.00
Geum vernum	St.Francois	*Solomon 5790*	MO	1218.00
Geum vernum	Ste. Genevieve	*Mohlenbrock 21327*	MO	1218.00
Geum laciniatum v. trichocarpum	Buchanan	*Delozier 2037*	MO	1220.00
Rubus idaeus v. strigosus	Greene	*Currier 89 017*	MO	1221.00
Rubus flagellaris	Gasconade	*Gereau & Brunner 2301*	MO	1227.99
Rubus enslenii	Franklin	*Shea 145*	MO	1228.00
Rubus enslenii	Lewis	*Brant & O'Donnell 1870*	MO	1228.00
Rubus enslenii	Madison	*Solomon, Bell, & Niblett 455*	MO	1228.00
Rubus invisus	Dallas	*Conrad 3603*	MO	1229.00
Rubus allegheniensis	Franklin	*Carbol 20*	MO	1231.99
Rubus orarius	Dade	*R. & A. Collett 180*	MO	1232.00
Rubus mollior	Lewis	*Brant & O'Donnell 1869*	MO	1234.00
Rubus mollior	Saline	*Brant & O'Donnell 2049*	MO	1234.00
Rubus pensylvanica	Franklin	*Berg 80*	MO	1235.00
Rubus pensylvanica	Franklin	*Berg 80*	MO	1235.99
Rubus ostryifolius	Dade	*Yatskievych 90-161*	MO	1236.00
Agrimonia pubescens	Callaway	*Brant & Gereau 1822*	MO	1241.00
Agrimonia pubescens	Perry	*Brant, Hannon, & Gereau 941*	MO	1241.00
Agrimonia pubescens	Ste. Genevieve	*Mohlenbrock 21292*	MO	1241.00
Rosa multiflora	Gasconade	*Gereau & Hannon 2311*	MO	1242.00
Rosa multiflora	Ray	*Delozier & Raveill 1067*	MO	1242.00
Rosa multiflora	Ste. Gene-			

	vieve	*Mohlenbrock 21361*	MO	1242.00
Rosa multiflora	Texas	*Summers & Ryan 3847*	MO	1242.00
Rosa multiflora	Vernon	*Chang 478*	MO	1242.00
Rosa mutliflora	Jackson	*Currier 208*	MO	1242.00
Rosa setigera v. tomentosa	Cass	*Brant 2047*	MO	1243.99
Rosa setigera	Cass	*Henderson 72-71*	MO	1243.99
Rosa setigera	Jefferson	*Sweet s.n.*	MO	1243.99
Rosa setigera	NewMadrid	*Lewis 2350*	MO	1243.99
Rosa setigera	St.Charles	*Davidse et al. 183*	MO	1243.99
Rosa xcentifolia	McDonald	*Bush 208*	MO	1245.00
Rosa arkansana v. suffulta	Lincoln	*Faber -Langendoen 64*	MO	1254.00
Rosa arkansana v. suffulta	Ripley	*Lewis 2360*	MO	1254.00
Prunus mexicana	Lincoln	*Schuette s.n.*	MO	1258.00
Prunus mexicana	Warren	*Raechal & Steyermark 99*	MO	1258.00
Prunus americana	Ste. Genevieve	*Mohlenbrock 21324*	MO	1259.00
Prunus americana	Vernon	*Chang 583*	MO	1259.00
Prunus hortulana	Ste. Genevieve	*Mohlenbrock 21358*	MO	1260.00
Prunus hortulana	Warren	*Raechal & Steyermark 109*	MO	1260.00
Prunus munsoniana	Cass	*Summers 2825*	MO	1261.00
Prunus munsoniana	Warren	*Raechal et al. 110*	MO	1261.00
Prunus mahaleb	Stone	*Smith & Kurz 2659*	MO	1265.00
Prunus mahaleb	Taney	*Smith 2871*	MO	1265.00
Prunus serotina	Dent	*Nee 27326*	MO	1266.00
	Simaroubaceae			
Ailanthus altissima	Barry	*Hornberger 963*	MO	1423.00
	Sapindaceae			
Cardiospermum halicacabum	Ste. Genevieve	*Brant & Holst 973*	MO	1489.00

Rhamnaceae

Rhamnus cathartica	Lincoln	*Ebinger 25166*	MO	1495.00
Ceanothus americanus	Polk	*Currier 89 019*	MO	1498.99

Vitaceae

Ampelopsis cordata	Perry	*Brant,Carter, & Noyes 1895*	MO	1500.00
Parthenocissus inserta	Washington	*Haller & Molyneux 18*	MO	1504.99
Vitis rupestris	Lincoln	*Miller, Noyes, & Pool 5431*	MO	1511.99

Malvaceae

Sida elliottii	Oregon	*Summers 3088*	MO	1528.00

Umbelliferae

Ptilimnium costatum	Stoddard	*Summers & Dodds 3521*	MO	1664.00
Oxypolis rigidior	Butler	*Summers 3116*	MO	1673.90

Primulaceae

Androsace occidentalis	Holt	*McGregor 36915A*	MO	1697.00
Dodecatheon frenchii	Ste. Genevieve	*Nelson 1809*	MO	1698.09
Dodecatheon meadia v. meadia f.album	Vernon	*Chang 406*	MO	1698.2
Dodecatheon meadia	Camden	*Henderson 68-145*	MO	1698.99
Dodecatheon meadia	Cass	*Henderson 66-235*	MO	1698.99
Dodecatheon meadia	St.Clair	*Henderson 66-235*	MO	1698.99
Lysimachia nummularia	Christian	*Redfearn 32982*	MO	1700.00
Lysimachia nummularia	Lincoln	*Brant et al. 576*	MO	1700.00
Lysimachia ciliata	Perry	*Brant et al. 657*	MO	1703.00
Lysimachia ciliata	St. Charles	*Brant & Summers 967*	MO	1703.00
Lysimachia ciliata	Vernon	*Sweet s.n.*	MO	1703.00
Lysimachia ciliata	Madison	*Solomon, Bell, & Niblett 444*	MO	1703.00
Lysimachia ciliata	Platte	*Henderson 68-374*	MO	1703.00
Anagallis arvensis	Ripley	*Ayers s.n.*	MO	1

Centunculus minima	Montgomery	*Brant & Gereau 586*	MO	1708.00
		Verbenaceae		
Verbena stricta f.albiflora	Barry	*Summers 2960*	MO	1842.1
		Solanaceae		
Solanum americanum	Ozark	*Smith 2997*	MO	1921.00
Solanum sarachoides	St.Charles	*Sullivan s.n.*	MO	1923.00
Solanum sarachoides	Dallas	*Sullivan s.n.*	MO	1923.00
Solanum carolinense f. albiflorum	Vernon	*Chang 136*	MO	1924.10
Lycopersicon esculentum	St.Louis	*Miller 5421*	MO	1928.00
Physalis pubescens var.pubescens	Oregon	*Summers 3094*	MO	1936.00
Physalis missouriensis	Texas	*Summers 3841*	MO	1937.00
		Scrophulariaceae		
Bacopa acuminata	Howell	*Summers 3815*	MO	1949.00
Bacopa acuminata	Stoddard	*Summers 2752*	MO	1949.00
Gratiola virginiana v. virginiana	Dent	*Steyermark 18930*	MO	1952.00
Verbascum blattaria f. blattaria	Montgomery	*Schuette 2079*	MO	1961.00
Chelone obliqua v. speciosa	Butler	*Summers 3069*	MO	1963.00
Chelone obliqua v. speciosa	Dunklin	*Pelton s.n.*	MO	1963.00
Scrophularia marilandica	Barry	*Hornberger 493*	MO	1971.99
Collinsia verna	St.Clair	*DeLozier 1913*	MO	1973
Seymeria macrophylla	Linn	*Schuette 2080*	MO	1990.00
Buchnera americana	Cass	*Smith 2572*	MO	2003
		Rubiaceae		
Galium arkansanum	Cedar	*Summers s.n.*	MO	2043.00
Galium tinctorium	Howell	*Summer 3568*	MO	2046.00
Diodia virginiana	Hickory	*Summers 2828*	MO	2050.99
Cephalanthus occidentalis	Perry	*Brant et al. 1910*	MO	2053.99
Houstonia pusilla	Vernon	*Chang 357*	MO	2055.99

ANNOUNCEMENT

CHANGE IN EDITOR

Effective with Volume 14, the new editor of *Missouriensis* will be George Yatskievych. Future manuscripts should be sent to him at the following address: Flora of Missouri Project, Missouri Botanical Garden, P. O. Box 299, St. Louis, MO 63166.